



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 10/20/2006

| APPLICATION NO. | FILING DA | TE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|--|-----------|---------------------|----------------------|---------------------|-----------------|--|
| 10/601,348 06/23/2003 | | 03 | Pascal Audinot | TIF-33831 | 1230 | |
| 23494 | 7590 10 | 0/20/2006 | | EXAMINER | | |
| TEXAS INS | TRUMENTS | HANNON, CHRISTIAN A | | | | |
| P O BOX 655474, M/S 3999 DALLAS, TX 75265 | | | ART UNIT | PAPER NUMBER | | |
| <i>511251</i> 10, 17 | | | | 2618 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief

| Application No. | | Applicant(s) | | |
|-----------------|---------------------|----------------|---|--|
| 10/601,348 | | AUDINOT ET AL. | | |
| | Examiner | Art Unit | _ | |
| | | 0040 | | |
| | Christian A. Hannon | 2618 | | |

| | Christian A. Hannon | 2618 | | | | | | | |
|---|--|---|--|--|--|--|--|--|--|
| The MAILING DATE of this communication appe | ears on the cover sheet with the c | orrespondence add | ress | | | | | | |
| THE REPLY FILED 20 September 2006 FAILS TO PLACE TH | S APPLICATION IN CONDITION F | OR ALLOWANCE. | | | | | | | |
| 1. The reply was filed after a final rejection, but prior to or or this application, applicant must timely file one of the follow places the application in condition for allowance; (2) a Not a Request for Continued Examination (RCE) in compliant time periods: | wing replies: (1) an amendment, aff otice of Appeal (with appeal fee) in c | idavit, or other evider compliance with 37 C | nce, which FR 41.31; or (3) | | | | | | |
| | a) The period for reply expires <u>3</u> months from the mailing date of the final rejection. | | | | | | | | |
| b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire Examiner Note: If box 1 is checked, check either box (a) or TWO MONTHS OF THE FINAL REJECTION. See MPEP 7 | ater than SIX MONTHS from the mailing (b). ONLY CHECK BOX (b) WHEN THE | g date of the final rejecti | on. | | | | | | |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of exunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office late may reduce any earned patent term adjustment. See 37 CFR 1.704(b) NOTICE OF APPEAL | on which the petition under 37 CFR 1.1 tension and the corresponding amount shortened statutory period for reply orig r than three months after the mailing da | of the fee. The approprinally set in the final Offi | iate extension fee ce action; or (2) as | | | | | | |
| The Notice of Appeal was filed on A brief in complifing the Notice of Appeal (37 CFR 41.37(a)), or any external a Notice of Appeal has been filed, any reply must be filed AMENDMENTS | nsion thereof (37 CFR 41.37(e)), to | avoid dismissal of th | | | | | | | |
| 3. The proposed amendment(s) filed after a final rejection, | but prior to the date of filing a brief. | will not be entered b | ecause | | | | | | |
| (a) They raise new issues that would require further co | | | | | | | | | |
| (b) ☐ They raise the issue of new matter (see NOTE below) (c) ☐ They are not deemed to place the application in be | | ducing or simplifying | the issues for | | | | | | |
| appeal; and/or | tter form for appear by materially re | ducing or simplifying | the issues for | | | | | | |
| (d) They present additional claims without canceling a | corresponding number of finally rej | ected claims. | | | | | | | |
| NOTE: (See 37 CFR 1.116 and 41.33(a)). | | | | | | | | | |
| 4. The amendments are not in compliance with 37 CFR 1.1 | | mpliant Amendment | (PTOL-324). | | | | | | |
| 5. Applicant's reply has overcome the following rejection(s |) : | · | | | | | | | |
| Newly proposed or amended claim(s) would be a non-allowable claim(s). | llowable if submitted in a separate, | timely filed amendme | ent canceling the | | | | | | |
| 7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is pro The status of the claim(s) is (or will be) as follows: Claim(s) allowed: | | ll be entered and an e | explanation of | | | | | | |
| Claim(s) objected to: Claim(s) rejected: <u>1-21</u> . | | | | | | | | | |
| Claim(s) withdrawn from consideration: | | | | | | | | | |
| AFFIDAVIT OR OTHER EVIDENCE | | | | | | | | | |
| The affidavit or other evidence filed after a final action, be because applicant failed to provide a showing of good an was not earlier presented. See 37 CFR 1.116(e). | | | | | | | | | |
| 9. The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to showing a good and sufficient reasons why it is necessar | overcome <u>all</u> rejections under appe | al and/or appellant fa | ils to provide a | | | | | | |
| 10. The affidavit or other evidence is entered. An explanation | | | • | | | | | | |
| REQUEST FOR RECONSIDERATION/OTHER | ut done NOT place the configstion : | n aandition for allews | b | | | | | | |
| The request for reconsideration has been considered by <u>See Continuation Sheet.</u> | • | n condition for allowa | nce pecause: | | | | | | |
| 12. Note the attached Information Disclosure Statement(s).13. Other: | (PTO/SB/08) Paper No(s). | | | | | | | | |
| | | All | ′ | | | | | | |
| | | Ü | | | | | | | |

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments have been wholly considered however they fail to place the application in a condition for allowance. Applicant claims that Wildhagen fails to teach, "that the gain of the VGA is determined by the magnitude of the output of the ADC. There are no words saying that. Instead, those paragraphs always refer to the VCA output." (Page 7 of applicant's arguments). The Examiner directs the Applicant to page 2 of Wildhagen, paragraph 27, where Wildhagen states "the digital VCA output signal 9 is forwarded to the absolute value determination unit 11 which determines the magnitude 12 of said digital VCA output signal 9." At this point a digital representation of the amplified analog received radio signal is input to a gain comparator in the digital domain for ultimately producing an analog signal to control the gain output from the VCA 5 of Figure 1. The Applicant goes on to cite paragraph 7 on page 1 of Wildhagen to show this, however the detail of the Wildhagen circuit is disclosed in page 2 paragraph 27 (which is cited above), not in the Applicant's citation. Simply put, the digital representation at the output of the analog to digital converter, that which produces the digital version of the VCA output, is what is used in Wildhagen to control the gain of the VCA. Applicant's further remarks on page 8 that "Wildhagen predicates [sic] and determines a gain of his VCA by the magnitude of the INPUT to the ADC (or equivalently, the output of the VCA) and compares it to a predefined reference voltage." In fact Wildhagen shows that the output of the VCA (Item 5, Figure 1) is input to a A/D converter (Item 8, Figure 1) the output of the VCA (Page 2, [0027]).

Claim 7 is an analogous method claim to the apparatus Claim 1, and Claim 13 is a broader recitation of claim 1; Claims 7 and 13 are similarly rejected.

Regarding claims 2 & 8 the Applicant argues that "sometimes receivers are analog, such as the analog super heterodyne receivers or optical fiber receivers; there are no digital bits; the Examiner's statements cannot be considered obvious". The examiner commends the Applicants exercised knowledge of the super heterodyne receiver, however the Applicant is incorporating a technology which is not of relevance to the argument at hand, the Applicant's invention is to a digital radio receiver (see application specification) therefore in the scope of digital receivers the examiner maintains that it is obvious that a plurality of digital bits are required to represent a radio signal. Claims 2 and 8 maintain their rejections over Wildhagen and the Applicant Admitted Prior Art (AAPA).

Claims 11,12 & 20 being dependent on Claims 1, 8, and 13, respectively, maintain their rejections.

Claims 14-18, being dependent on Claim 13, maintain their rejections.

Claims 19 & 21 maintain there rejections, if the Applicant is respectfully advised that if a specific reason to implement additional components was intended it should have been claimed and not left to an inference from the specification as the Applicant has offered in support of arguing the rejection. The Examiner maintains the rejection as set forth in the Final Rejection for these claims.

Claims 3-6, 9 & 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Wildhagen and further in view of Zamat. The Applicant appears to be arguing that because Zamat teaches that Zamat is utilizing the first group of Most Significant Bits, that this is different from the Applicant's invention. However Zamat reads on "a most significant bit" because Zamat provides for one MSB and then others, thereby reading on the claim. Therefore claim 3, and the analogous method claim 9, maintain their rejections.

Claim 4, is dependent on Claim 3 and the rejection stands for the forgoing reasons.

In regards to claim 5, the Applicant is arguing that the multiplicity issues between the Zamat reference and the application's invention. If the Applicant wished to claim a single signal, a single digital representation or a single magnitude the applicant should have claimed that with words like "only one signal", "a single signal" etc. The Zamat reference reads on a signal. Claim 5 and the analogous claim 10 have their rejections maintained.

Claim 6, is another multiplicity issue argued by the applicant that the Examiner refers the applicant to the above paragraph to see why this rejection too is maintained.

QUOCHIEN B. VUONG
PRIMARY EXAMINER